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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,593	03/27/2001	Kenneth Jenks	PALM-3583.US.P	3487

7590 09/10/2003

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LEE, KYUNG S

ART UNIT	PAPER NUMBER
	2832

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/819,593	JENKS ET AL. <i>[Signature]</i>	
	Examiner	Art Unit	
	Richard K. Lee	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 June 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-40 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 March 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 4-5, 8-9, 12-14, 17, 23-25, 28-30, 33-37 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Brick et al. (6,172,620).

Brick et al. teaches a button module comprising:

a button frame module 80 (see fig. 5) formed with a vertical cavity to align with

the button 56;

a membrane layer 72 disposed on the outer side (reference 74) of the button frame 80 and covering the vertical cavity; and

the button module covers the button of the portable computing device.

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Regarding claims 4-5 and 34, Brick et al. teaches the membrane layer 72 being composed of a flexible elastomer (col. 5, line 63). Elastomer (Hawley's Condensed Chemical Dictionary, page 437) includes silicone and rubber.

Regarding claims 8, 9, 12, 23-25, 28, 35-37 and 40, Brick et al. teaches the frame being comprised of plastic (col. 6, line 8). Further, plastic includes polycarbonate and nylon (Hawley's page 888).

Regarding claims 13, 14 and 29, Brick et al. teaches the button module removably coupled to a top cover 12 (fig. 5) of the personal digital assistant (PDA, col. 1, line 15).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 6-7, 10-11, 18-22, 26-27, 31-32, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brick et al. in view of Ohmae et al. (5,373,055).

Brick et al. teaches the claimed invention except for the membrane layer comprises a thermo-plastic elastomer (TPE) or thermo-plastic urethane (TPU). Ohmae et al. teaches the use of thermo-plastic elastomer for its flexibility as well as its excellent mechanical and thermal properties (col. 1, line 15). Ohmae et al. further teaches the use of thermo-plastic urethane as material that provides hard rubber or leather-like characteristics (col. 1, line 21).

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One skilled in the art, at the time of the invention, would have found it obvious to provide the membrane layer of Brick et al. with either TPE or TPU of Ohmae et al. for the purpose of providing a material which possesses flexibility as well as its excellent mechanical and thermal properties, and provides hard rubber or leather-like characteristics, respectively.

Regarding claims 6, 7, 22 and 23, Brick et al. and Ohmae et al. teach the claimed invention except for the membrane layer comprises a leather or nylon. It would have been an obvious engineering choice to use leather or nylon for the membrane layer since it appears that the invention would perform equally well with TPU, TPE, silicone and rubber.

Regarding claims 10-11, 26-27 and 38-39, Brick et al. and Ohmae et al. teach the claimed invention except for the frame module comprises a metal or an alloy. It would have been an obvious engineering choice to use a metal or an alloy for the for the frame module since it appears that the invention would perform equally well with plastic.

1. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brick et al. Brick et al. teaches the claimed invention except for the button module coupled to a midframe or a rear cover of the PDA. It would have been an obvious engineering choice to couple the button module to the cover, the rear cover or the midframe of the PDA since it appears that the invention would perform equally well with by coupling to the cover as shown by Brick et al.

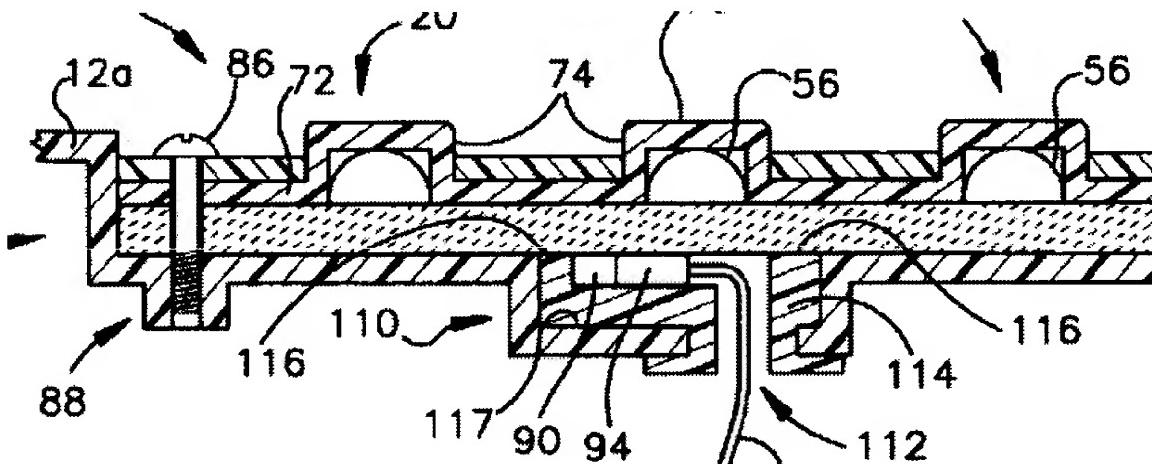
Response to Arguments

5. Applicant's arguments filed June 19, 2003 have been fully considered but they are not persuasive.

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Applicants argue, "Brick reference does not teach or suggest a removable button module having a membrane layer disposed above the button frame module as specified in amended claim 1." The examiner respectfully disagrees. Brick et al. teaches a removable button frame 80 (fig. 5, a portion shown below) with a membrane layer 72 (comprising of 72 and 74) with membrane portion 74 disposed above the button frame 80.

FIG. 5 of Brick et al.



Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard K. Lee whose telephone number is (703) 306-9060. The examiner can normally be reached on Mon. to Fri. 5:30AM to 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (703) 308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Richard K. Lee
Examiner
Art Unit 2832

LINCOLN DONOVAN
PRIMARY EXAMINER
GROUP 2103